

Ten Week Brood Observations 2002

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Abstract

Ten week brood observations are used as an index to productivity. For all species surveyed: ruffed grouse, pheasant, gray partridge, and wild turkey, the number of broods counted per observer in 2002 increased from 2001 levels. Participation by observer in the 2002 Ten Week Brood Survey, however, decreased 29% from the 2001 level.

Methods

Wildlife Surveys sent regional land leaders survey materials and instructed them to distribute the survey forms to all field personnel in their region. Field personnel were asked to record the number of ruffed grouse, pheasant, gray partridge, and wild turkey broods observed while doing normal field operations. The survey period began the second week in June and ended the third week of August, 2002. When one of the four species was observed with a brood, participants recorded the date, county of the observation, number of young in the brood, and whether all the young in the brood were counted. A summary form was mailed at the end of August to all field personnel. On the summary form, participants reported all brood observations, the percent of their time spent in the field, and whether they or others that worked for them collected the observations. These forms were returned to Wildlife Surveys and the data were entered into the DNRVAX mainframe computer and summarized using the Statistical Analysis System (SAS).

Results

Two hundred and sixty five (265) observers sent back 215 surveys, reporting their observations of game broods of ruffed grouse, pheasant, gray partridge, and wild turkey in the summer of 2002. The number of observers declined from 2001 to 2002 by 29%, and the number of surveys returned by these observers decreased by 25% from 2001.

Ruffed Grouse

The average number of ruffed grouse broods observed during the ten week period per field participant in 2002 was 0.73 (Fig. 1). Broods per observer increased 26% from 2001 when 0.58 broods per observer were recorded. This is the first year since 1999 that the number of ruffed grouse broods observed increased. The average number of broods observed was below the long-term (1970-2001) mean of 1.41 broods per observer. The number of young observed per brood in 2002 was 5.9 compared to 4.7 in 2001, an increase of 25.5%.

Pheasant

Pheasant observations in 2002 increased to 0.44 broods per observer (Fig. 2). Broods per observer showed an increase of 52% from 2001 when 0.29 broods per observer were recorded. The average number of broods per observer, however, dipped below the long-term (1970 - 2001) mean of 0.53. Pheasant brood observations in 2000 had risen above the long term mean for the first time since 1981. In 2002, average brood size observed was 4.7 compared to 5.5 in 2001, representing a decline of 14.5%.

Gray Partridge

Gray partridge observations in 2002 increased to 0.02 broods per observer (Fig 3). A total of only four gray partridge broods were observed over the ten-week period. The average number of broods observed was below the long-term (1980 - 2001) mean of 0.06. Average 2002 brood size, however, was 10.8 compared to 4.8 in 2001, representing more than a doubling although sample size is small.

Wild Turkey

In 2002, the number of wild turkey broods per observer was 2.28 (Fig 4). Brood per observer increased 6% from 2001 and was well above the long-term (1987-2001) mean of 1.01 broods per observer. The average 2002 brood size was 5.3, remaining unchanged from 2001.

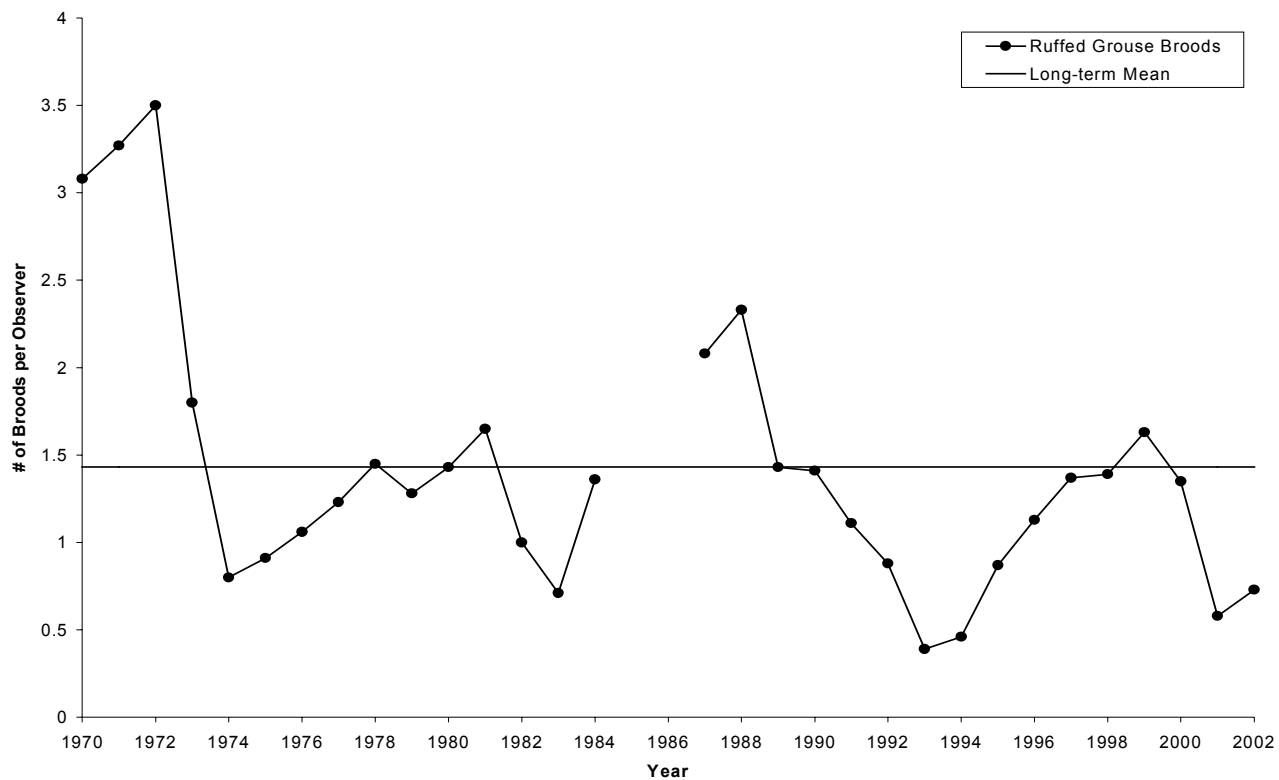


Figure1. Number of ruffed grouse broods seen per observer 1970-2002.

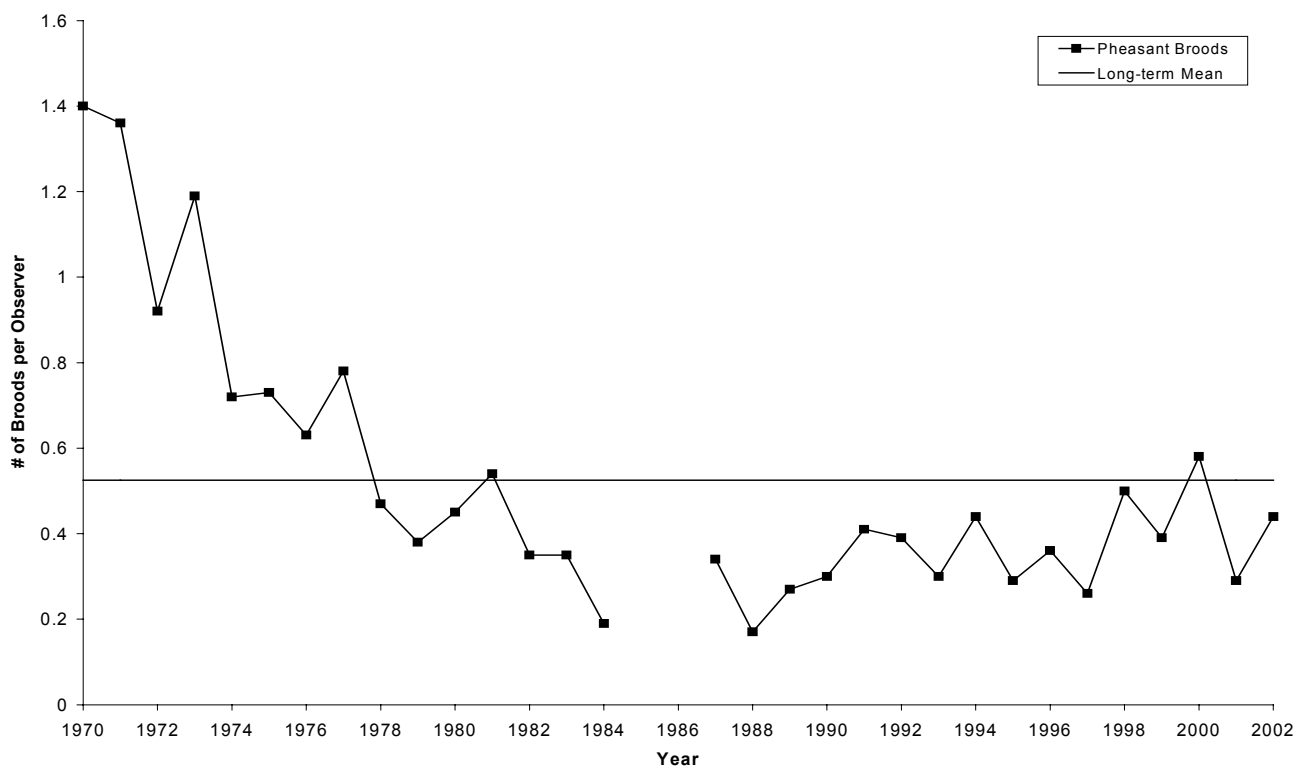


Figure 2. Number of pheasant broods seen per observer 1970-2002.

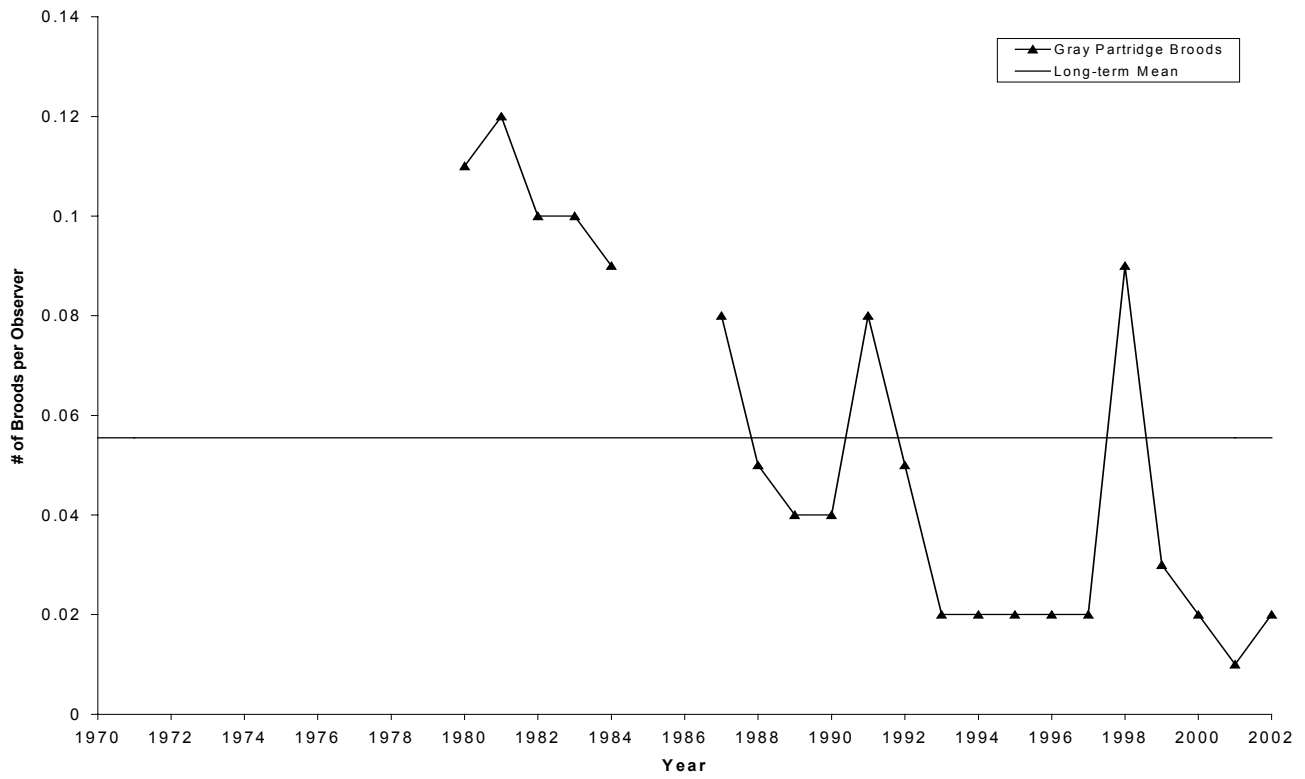


Figure 3. Number of gray partridge broods per observer 1980-2002.

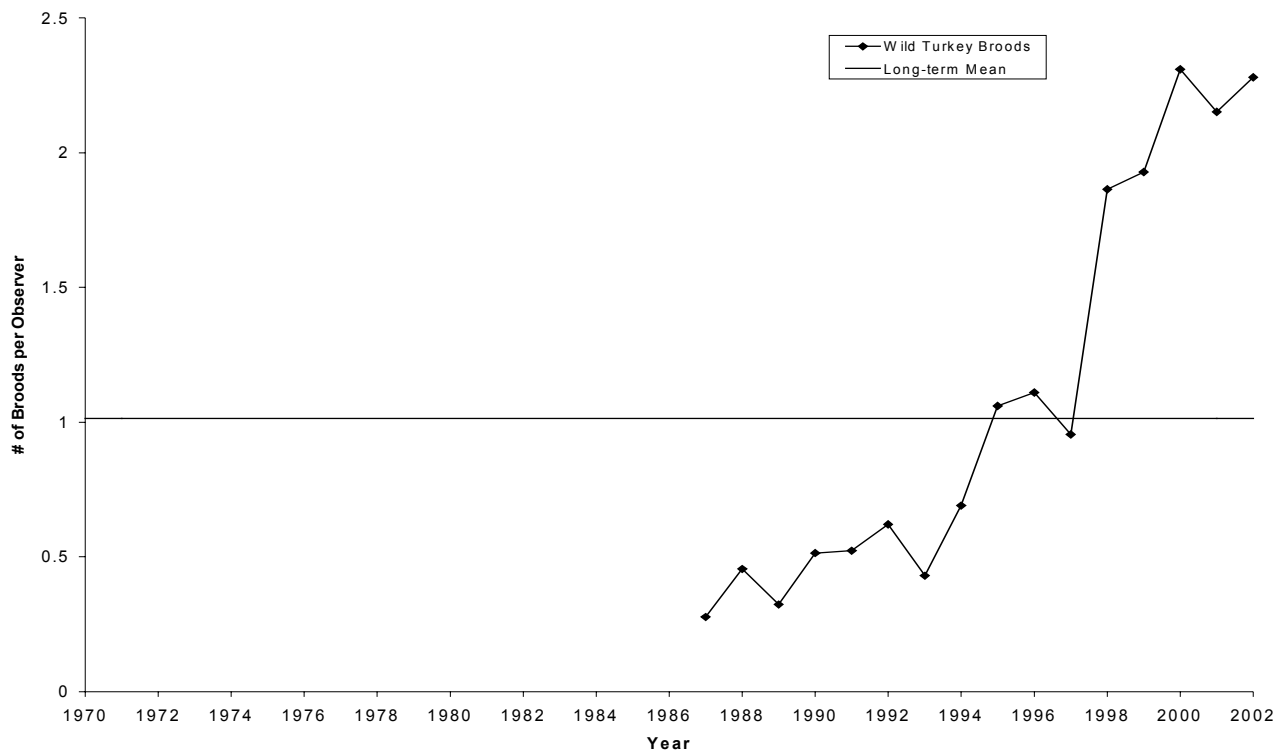


Figure 4. Number of wild turkey broods seen per observer 1987-2002.